

Title (en)

SURFACE LIGHT SOURCE DEVICE

Title (de)

OBERFLÄCHENLICHTQUELLENVORRICHTUNG

Title (fr)

DISPOSITIF DE SOURCE LUMINEUSE EN SURFACE

Publication

EP 2808598 A1 20141203 (EN)

Application

EP 12826595 A 20120309

Priority

JP 2012056182 W 20120309

Abstract (en)

A light guide plate (33) is provided with a light introduction part (35) with a wedge shape, and a light guide plate main body (34) that is thinner than the maximum thickness of the light introduction part (35) and is provided continuous with the light introduction part (35). A point light source (32) is disposed in a position facing an end surface (light incidence surface (38)) of the light introduction part (35). On a light exit side surface of the light guide plate (33) or a reflective surface for the same is a directivity conversion pattern (36) for converting the directivity spread of light incident to the light introduction part (35) in the direction of the thickness of the light guide plate to directivity characteristics inclined towards a direction parallel with a surface direction of the light guide plate (33). At a part of a cross-sectional surface of the directivity conversion pattern (36) cut parallel to the light incidence surface (38) positioned forward of the point light source (32) and is within the region of the light source width, the lateral width of a sloped surface of a pattern element, a normal line of which is oriented toward a side facing the light source center, is narrower than the lateral width of a sloped surface of the pattern element oriented toward the light source center side or is the same in one part.

IPC 8 full level

F21S 2/00 (2006.01); **F21Y 101/02** (2006.01)

CPC (source: EP KR US)

G02B 6/0016 (2013.01 - EP KR US); **G02B 6/0028** (2013.01 - KR); **G02B 6/0036** (2013.01 - KR US); **G02B 6/0038** (2013.01 - EP KR US);
G02B 6/0046 (2013.01 - KR); **G02B 6/0028** (2013.01 - EP US); **G02B 6/0046** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

US 2014022814 A1 20140123; US 9128224 B2 20150908; CN 103403441 A 20131120; CN 103403441 B 20160120;
EP 2808598 A1 20141203; EP 2808598 A4 20150318; EP 2808598 B1 20190508; JP 5278635 B1 20130904; JP WO2013132661 A1 20150730;
KR 101498395 B1 20150303; KR 20140091455 A 20140721; WO 2013132661 A1 20130912

DOCDB simple family (application)

US 201213821198 A 20120309; CN 201280002724 A 20120309; EP 12826595 A 20120309; JP 2012056182 W 20120309;
JP 2013511471 A 20120309; KR 20137003742 A 20120309